Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

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In the Matter of)	GN Docket Nos. 09-47, 09-51, 09-137
Broadband Needs in Education,)	CC Docket No. 02-6
Including Changes to E-Rate)	WC Docket No. 05-195
Program to Improve Broadband)	
Deployment – NPB Notice #15)	

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REPLY COMMENTS OF THE BILL AND MELINDA GATES FOUNDATION

Since 1997, the Bill & Melinda Gates Foundation ("the foundation") has invested nearly $350 million to help create public access to computer workstations and the Internet through the nation's public libraries. In 1997, the foundation estimated that one in four public libraries offered internet access. Today 99% of public libraries offer some form of free, public Internet access, although the quality of this access varies significantly.[1] This progress was due in large measure to the 1996 Telecommunications Act which expanded the Universal Service Fund and created the federal E-rate program. From 1998 to 2007, the E-rate program provided nearly $22 billion to help public libraries and K-12 schools pay for telecommunications and Internet access.[2] Although the majority of the foundation's historical investments have been in public library hardware and connectivity, we have also committed nearly $2 million to increase public library participation in the E-rate Program through education and training.

We appreciate the Federal Communications Commission's (FCC) inquiry into the E-rate program as it relates to the creation of the national broadband plan and the objective to ensure that all Americans have access to broadband and the educational, economic, and social opportunities it affords. The following is intended to affirm and underscore several of the comments previously filed with the FCC particularly as they relate to 1) the current limitations of the E-rate program in deploying sufficient broadband to schools and libraries; 2) the need for additional funding to support the E-rate Program; and 3) the need to simplify the E-rate application process.

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[1] American Library Association, _Libraries Connect Communities 3 – Pubic Library Funding & Technology Access Study, 2009_.   Sixty-percent of public libraries indicate that their current connectivity is insufficient to meet patron demand.

[2] United State Government Accountability Office, "Long-Term Strategic Vision Would Help Ensure Targeting of E-Rate Funds to Highest-Priority Uses", march 2009.

I.   LIMITATIONS OF THE E-RATE PROGRAM IN DEPLOYING SUFFICIENT BROADBAND TO PUBLIC LIBRARIES AND SCHOOLS

The importance of the E-rate program in connecting schools and public libraries over the last decade cannot be over stated. The American Library Association estimates that today, nearly 60 percent of the approximately 9,000 public library systems in the country currently participate in the E-Rate program. [3] The availability of E-rate to make Internet access affordable to public libraries has been integral to creating public access to technology for individuals without other means of accessing the Internet and the on-line opportunities it affords. Despite this success, the E-rate program will be challenged to keep pace with the increasingly growing bandwidth needs of schools and public libraries.

The E-rate program has, in large part, been successful in lowering two of the three primary barriers to acquiring sufficient broadband access among public libraries. Roughly one-third of public libraries cite a lack of access to sufficient broadband infrastructure; another third point to the inability to pay for additional bandwidth even if it is available because of one-time installation and/or recurring costs that are cost-prohibitive; and the final third point to a lack of awareness and/or priority to upgrade insufficient connectivity.[4] We surmise that these same barriers exist for K-12 schools as well. The E-rate program has proven to be particularly successful in reducing the cost burden of paying for broadband access where it is readily available. However, there are significant limitations to the E-rate program in communities where there is a lack of sufficient broadband infrastructure, and as such, the program is not a panacea for bringing sufficient broadband access to all schools and libraries.

Although the FCC does not bar eligible schools and libraries from seeking E-rate funding to defray the costs of infrastructure investments necessary to provide high-capacity broadband access[5], there is an inherent tradeoff between using E-rate funds for these non-recurring costs and reducing the funding available to lower the burden of recurring costs associated with paying for high-capacity bandwidth. The current size of the E-rate fund simply cannot support both the non-recurring costs of building necessary infrastructure and subsidizing the recurring costs of service. Furthermore, many schools and libraries struggle to pay for the portion of non-recurring costs that remain after E-rate subsidies. Finally, where E-rate supported services are requested by a library or school system, this may in fact, create a sufficient incentive for a service provider to build-out the necessary infrastructure to deliver this service. However, in less densely populated areas of the country or more rural communities, a school or library that requests E-rate discounted services alone may not create sufficient demand for service

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[3] American Library Association – *Libraries Connect Communities, p. 54.*
[4] American Library Association - *Libraries Connect Communities: Public Library Funding & Technology Access Study* –2007.
[5] FCC 00-354, September 26, 2000.

providers to build-out needed infrastructure.   Here, other incentives are necessary to spur infrastructure investments and to enable schools and libraries to take full advantage of the E-rate program.

In the short-run, the National Telecommunications & Information Administration's (NTIA) Broadband Technology Opportunities Fund (BTOP) will enable schools and libraries to partially close this infrastructure funding gap. However, additional infrastructure needs will remain following the conclusion of BTOP. The FCC should consider how best to create a longer-term solution that would provide additional funding and/or create stronger incentives to meet the broadband infrastructure needs of schools and libraries , as the current E-rate program alone will not be adequate given the current funding limitations of the program.

II.   CURRENT E-RATE FUNDING IS INSUFFICENT TO SUPPORT ELIGIBLE SERVICES

Several respondents commented that the $2.25 billion E-rate funding cap has not been increased, even for inflation, since the first year of the E-rate program in 1998. This is problematic as current funds are insufficient to support the demand for eligible E-rate services. With growing annual demand for *Priority 1* services (telecommunications services & Internet access*)* E-rate funds available for *Priority 2 services* (internal connections necessary to transport information to individual classrooms or library rooms – e.g., cabling, switches and routers) have diminished over time. As noted in a recent GAO report, *"Requests for E-rate funding consistently exceed the cap, and increased commitments for Priority 1 Services, combined with significant undisbursed funds, limit funding for Priority 2 services".*[6]

Funds committed to *Priority 1* services nearly doubled between 1999 and 2007.[7] Should this trend continue and the cap on E-rate not be lifted, support for access to advanced telecommunications and information services (e.g., high-capacity broadband) will need to be limited by the Commission in some fashion and funding for *Priority 2* services will be completely unavailable. Without raising the cap on the E-rate fund, both the support for access and the ability of schools and libraries to use broadband connectivity will be negatively impacted. In fact, less than nine-percent of public libraries reported receiving E-rate funding for *Priority 2* services in the 2008.[8] A growing number of schools and public libraries cannot afford

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[6] *Long-Term Strategic Vision Would Help Ensure Targeting of E-rate Funds to Highest-Priority Uses, p.13* – U.S. Government Accountability Office, March 2009
[7] GAO, p. 19.
[8] ALA, *Libraries Connect Communities*, 2009; p. 53.

connectivity upgrades because of the inability to pay for one-time only installation, equipment and transport costs.[9]

We support the recommendations of others responding to the FCC's notice to, at a minimum, raise the cap on the fund to accommodate the rate of inflation. Ideally, the cap would be raised to meet the current broadband needs of schools and public libraries. Increasing the E-rate cap to support eligible expenses under the current E-rate fund should be the FCC's priority before expanding the fund to support other entities or expenses at this time.

III.   APPLICATION PROCESSES AND REQUIREMENTS DETER E-RATE PARTICIPATION

Although nearly 60 percent of public libraries participate in the E-rate program, those that opt not to participate often cite the administrative burden of the E-rate application process as a deterrent to their participation. The two most frequently cited reasons for not applying for E-rate discounts are "the E-rate application process is too complicated" and "our total E-rate discount is fairly low and not worth the time needed to participate in the program". [10] As noted above, the foundation has invested nearly $2 million to support public libraries in successfully applying for E-rate discounts through application workshops and bolstering capacity in the field. And while we have observed some increase in the numbers of public libraries participating in the E-rate program over the life of our grant, simplifying the application process would go a long way to further advancing this goal.

We appreciate the complexity of administering a program of the size, nature and scale of the E-rate program. However, we would strongly encourage the FCC consider the American Library Association's recommendations to simplify the application process as referenced in its recent response to the FCC and previous filings with the FCC to reduce the applicant burden of applying for E-rate funding.[11]

Finally, we strongly encourage the FCC and the Universal Service Administration Company (USAC) to take steps to improve its systems for collecting data on the E-rate program. By collecting better information, the FCC and USAC will be able to consider important program design questions in a more timely and effective manner. As an example, our grant to the American Library Association's Office of Information & Technology to provide E-rate workshops

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[9] The foundation recently made grants to support improved connectivity in public libraries in five states. In reviewing these grant proposals, applicants noted that some high bandwidth options (e.g., fiber and T-3) are cost prohibitive both in terms of one-time equipment and installation costs which ranged from $1,000 - $2,600 and monthly subscription costs which often exceeded $1,000 per month (before E-rate discounts were applied).

[10] ALA, *Libraries Connect Communities*, 2009; p. 54.
[11] Please see p. 16 of the American Library Association's Submission in Response to NBP Public Notice #15 – November 20th.

to public libraries across the country also included funding to capture state by state participation rates and total discounts received because this information was not readily available through USAC. We offer this example not as a criticism of the very committed USAC staff, but as an illustration of the kind of basic E-rate program information that would be useful for the FCC and other policy makers to have in hand as they seek to understand the benefits and limitations of the current program.

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Thank you for the opportunity to respond to the comments received by the FCC. We would be pleased to respond to any questions the FCC may have on the comments and recommendation put forth in this submission.

Respectfully Submitted,

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December 9, 2009